

REMARKS

Claims 1, 3, 5, 6 and 8-11 are pending in the present application. Claims 2, 4 and 7 have been cancelled. Claim 1 has been amended by incorporating the subject matter of original claims 4 and 7 and the Examples at pages 10-17 of the specification. Claims 3, 5 and 6 have been amended to recite methods for alkaline cleaning. New claims 8-11 are supported by the Examples at pages 10-17 of the specification. More specifically, claim 8 is supported by Examples 1, 3 and 5; claim 9 is supported by Examples 2 and 7; claim 10 is supported by Examples 1 and 3; and claim 11 is supported by Example 4. No new matter has been added by way of the above amendments.

Rejection under 35 USC § 112, 2nd paragraph

Claims 1-7 have been rejected under 35 USC § 112, 2nd paragraph as being indefinite because the claims appear to require metallic ions while the specification indicates that the metallic ions can be supplied from tap water (hard or non-deionized water) or from the aluminum surface being cleaned.

Applicants have amended the claims to recite that metallic ions are added to the alkaline cleaning liquid as ingredient (B). Metallic ions may also be present in the water used in the cleaning liquid (i.e. “city water” as described in the Examples). Thus, while metallic ions may be naturally occurring in the water used to prepare the cleaning liquid, the claim specifies that additional metallic ions are added to the cleaning liquid as ingredient (B).

Accordingly, Applicants assert that the claims are not indefinite and respectfully request that this rejection be withdrawn.

Rejection under 35 USC § 102(b)

Claims 1, 3, 4, 6 and 7 have been rejected under 35 USC § 102(b) as being anticipated by Aoki et al. (US 5,382,295). This rejection is respectfully traversed. Reconsideration and withdrawal are requested.

Aoki teaches an aluminum cleaning composition similar to that instantly claimed by Applicants. However, Aoki fails to explicitly disclose that metallic ions selected from Ca, Mg, Mn, Fe, Zn and Cu are added to the composition used in the aluminum cleaning process. The fundamental assumption made in the rejection is that these metallic ions are inherently present in the composition of Aoki since the Aoki composition uses water therein, and this water may or may not be deionized. This assumption is no longer relevant since the claims are now drawn to a process/method and are no longer drawn to the cleaning liquid composition.

Aoki fails to disclose that metallic ions selected from Ca, Mg, Mn, Fe, Zn and Cu are **added** to the composition, independent of the metallic ions which may or may not be present in the water used in the composition. Consequently, Aoki further fails to disclose that a weight ratio is maintained wherein the ratio of organic phosphonic acid and its salts to the one or more metallic ions (Ca, Mg, Mn, Fe, Zn and/or Cu) in the alkaline cleaning liquid is from 100 : 0.05 to 20.

Accordingly, since Aoki fails to anticipate the process of Applicants invention, Applicants respectfully request that the rejection under 35 USC § 102(b) be withdrawn.

Rejection under 35 USC § 103(a)

Claims 1, 3, 4 and 6 have been rejected under 35 USC § 103(a) as being obvious over Barrat et al. (US 4,446,035).

Claims 1, 4, 5 and 6 have been rejected under 35 USC § 103(a) as being obvious over Clapperton et al. (US 6,177,396).

Claims 1, 3, 4 and 6 have been rejected under 35 USC § 103(a) as being obvious over Miracle et al. (US 2006/0089284).

Claims 1, 3, 4 and 6 have been rejected under 35 USC § 103(a) as being obvious over Dykstra et al. (US 6,903,060).

These rejections are respectfully traversed. Reconsideration and withdrawal thereof are requested.

As described in detail in the Remarks filed April 24, 2009, Applicants have discovered that the fluctuation of metal ion quantities in a cleaning liquid directly influences the etching stability and uniformity during continuous operation and, as a result, causes pitting (or localized) corrosion of the aluminum container. As Applicants' comparative evidence demonstrated, the alkaline cleaning liquid and process of the instant invention allow for continuous production with

various water sources while still maintaining etching uniformity. This holds true throughout the cleaning process even as the metal ions fluctuate from the beginning of the process to the end of the process. Conventional alkaline cleaning methods and compositions, such as those described in Barrat, Clapperton, Miracle and Dykstra, suffer from a lack of uniform, stable etching due to a fluctuation in the amount of the particular metal ion components which are present in the cleaning liquid during continuous production.

Method claim 7 was excluded from the 35 USC § 103(a) rejections since each of these references failed to teach Applicants' method for alkaline cleaning of aluminum or aluminum alloy. Claims 1, 3, 5, 6 and 8-11 which remain in the instant application are each directed to embodiments of the method of original claim 7, now cancelled.

Accordingly, since each of Barrat, Clapperton, Miracle and Dykstra fails to teach the methods according to Applicants claimed invention, the rejections under 35 USC § 103(a) should be withdrawn.

In view of the above amendments, Applicants believe that the pending application is in condition for allowance.


CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Marc S. Weiner Reg. No. 32,181 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By:  # 32181

Marc S. Weiner
Registration No.: 32,181
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant